



TEAM Norfolk

**Hurricane Sandy
Council Briefing
November 6, 2012**

Timeline of Events

October 25

Department Preparations Underway

4:00pm First EOC Briefing

October 26

10:45am Local Declaration of Emergency

11:00am Governor's Declaration of Emergency announced

October 27

5:00pm Joint Information Center (JIC) Activated

6:00pm Partial EOC Activation (Public Safety and Human Services in Support of Shelters)

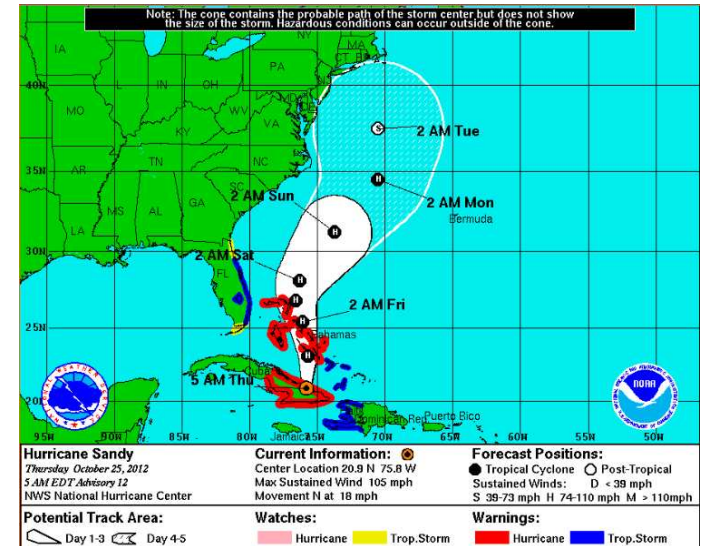
6:30pm Shelters Opened

6:30pm Parking Safe Havens Available

- City garages as well as NPS lots, ODU garages and private sector partner lots.

October 28

6:00am Full EOC Activation



Timeline of Events (Cont.)

October 29

3:30pm 3 Shelters Closed; Consolidated into Bayview Recreation Center

October 30

9:00am Flood Gate Opened

9:00am Damage Assessments Began

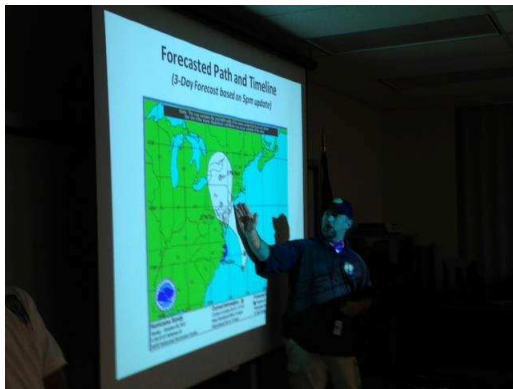
11:00am Last Shelter Closed

12:00pm Final EOC Briefing / “Hotwash”

6:00pm End of Local Declaration

November 1

12:00pm Termination of Local Declaration



Top High Water Events – Sewells Point

NOS CO-OPS Data

Date	Storm Type	Above MLLW (1983-2001)
August 23, 1933	Hurricane (unnamed)	8.02 feet
September 18, 2003	Hurricane Isabel	7.89 feet
November 12, 2009	Nor'easter	7.75 feet
August 27, 2011	Hurricane Irene	7.56 feet
March 7, 1962	Ash Wednesday Storm	7.22 feet
September 18, 1936	Hurricane (unnamed)	6.72 feet
November 22, 2006	Thanksgiving Nor'easter	6.63 feet
February 5, 1998	Twin Nor'easter (#2)	6.58 feet
October 7, 2006	Columbus Day Nor'easter	6.52 feet
April 27, 1978	Nor'easter	6.41 feet
April 11, 1956	Nor'easter	6.32 feet
September 16, 1933	Hurricane (unnamed)	6.12 feet
January 28, 1998	Twin Nor'easter (#1)	6.04 feet
September 16, 1999	Hurricane Floyd	5.97 feet
September 27, 1956	Hurricane Flossy	5.92 feet
September 12, 1960	Hurricane Donna	5.92 feet



SANDY
6.85'

Local Wind & Rain Observations

Norfolk International Airport

Rainfall through 8 am 10/30 - **5.68"**;
max wind gust 10/28 - 52 mph; max
wind gust 10/29 - 49 mph

Norfolk Naval Air Station

Rainfall through 8 am 10/30 - **4.3"*****;
max wind gust 10/28 - 53 mph; max
wind gust 10/29 - 46 mph**

*** - some data missing on 10/29 @ Norfolk NAS.*



Unity of Effort

KEYS:

Partnerships & Collaboration

Data-driven decisions made and communicated early



FINANCE

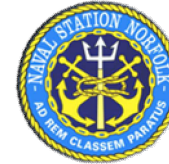
NORFOLK COMMUNITY SERVICES BOARD

OFFICE OF BUDGET & GRANTS MANAGEMENT

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT



The Rest of the Team..



Virginia
Voluntary Organizations
Active in Disaster

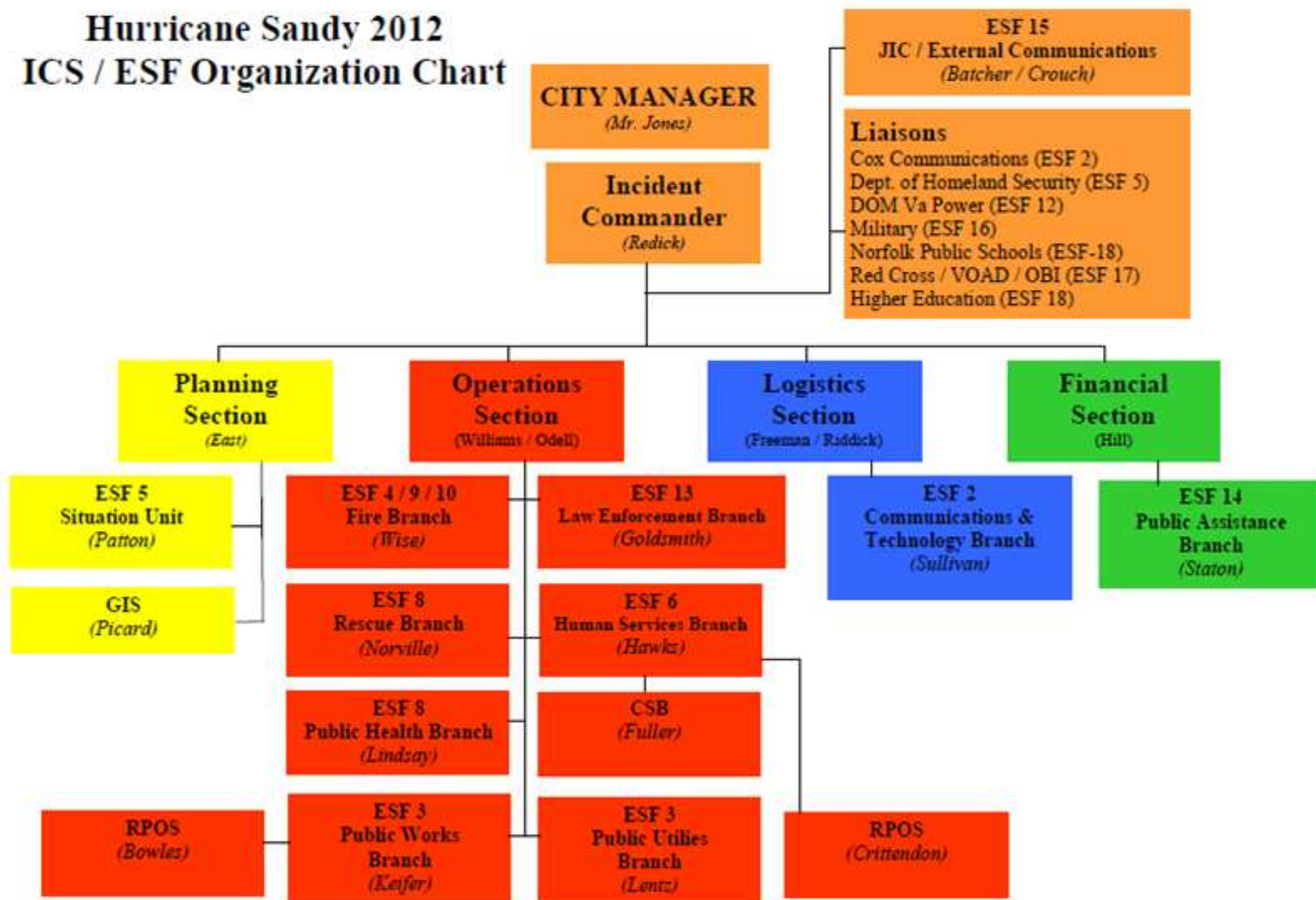
BLACKHAWK!

55 Positions / Agencies logged into WebEOC under the
'INCIDENT - Tropical Storm Sandy 2012' between 10/25/2012-10/30/2012

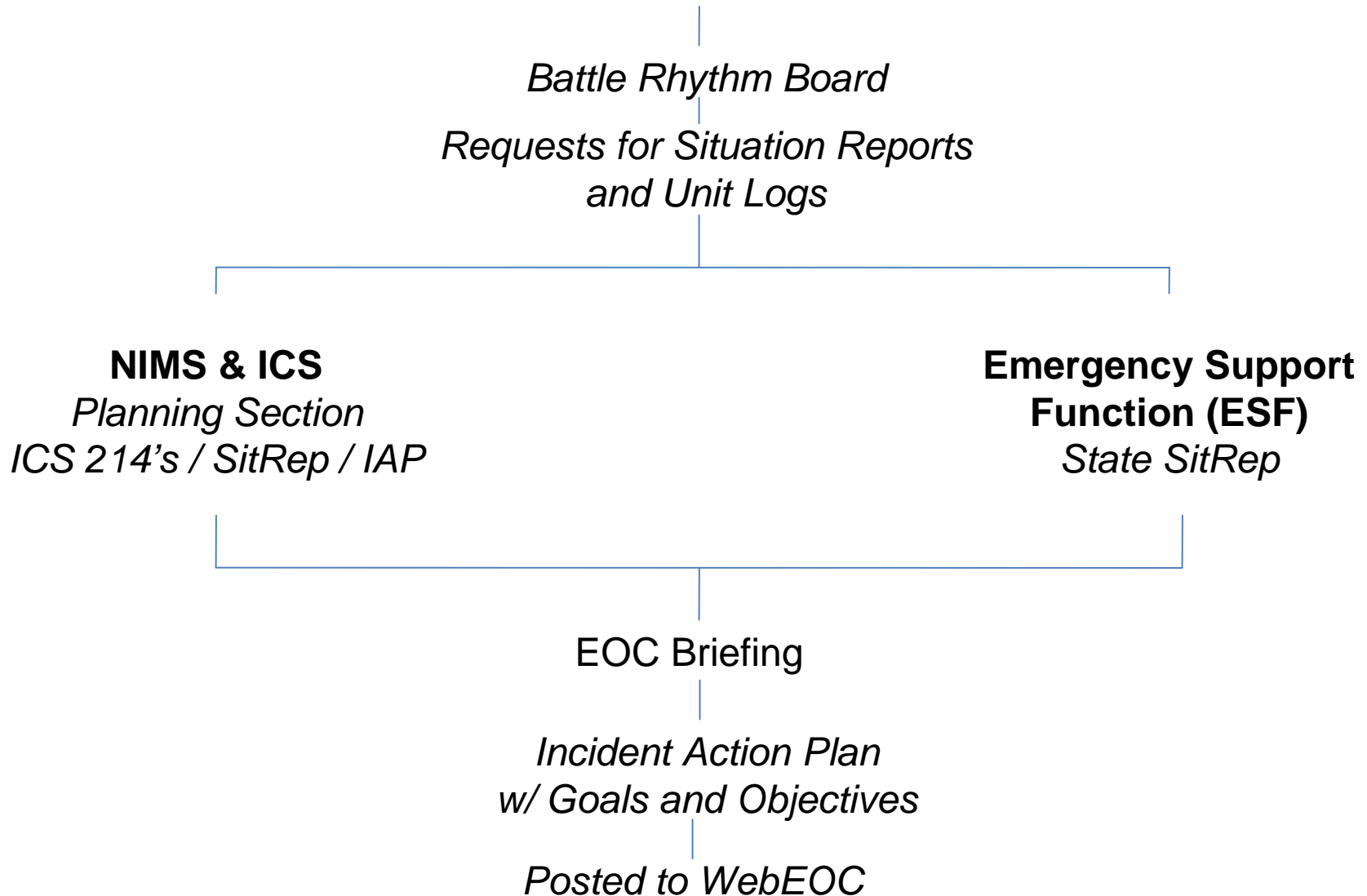


147 different people logged on at least once.

Hurricane Sandy 2012 ICS / ESF Organization Chart



Data Collection & Reporting Process





Communications with Community Partners



WebEOC 7.3

[iredick as Hospital Staff](#) [Log Off](#)

[Daily Operations - October - December 2011](#)

Boards

[..Position Log..](#)

[Battle Rhythm](#)

[LOCAL Situation Report \(ESF 8\)](#)

[MEDIA REQUESTS](#)

[Mission/Task](#)

[Press Release](#)

[Shelters](#)

[Shelters Summary](#)

[Significant Events](#)

[Transportation - Road Conditions](#)

Menus

[Dominion Power Web Links »](#)

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[Transportation Links »](#)

[VA Emergency Web Links »](#)

[Weather Web Links »](#)

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[WebEOC Help](#)

INCIDENT - Tropical Storm Sandy 2012		
Battle Rhythm - Sandy 2012		
New Event		Print
10/25/2012 14:00:00	EOC Briefing at Norfolk Police Third Patrol Division (901 Asbury Avenue, Norfolk, VA 23513).	Redick
10/26/2012 10:00:00	VDEM Region 5 Conference Call	Redick / EOC
10/26/2012 14:00:00	EOC BRIEFING CANCELLED	
10/27/2012 10:00:00	VDEM Region 5 Conference Call	Redick
10/27/2012 16:00:00	Regional Emergency Manager Conference Call	Redick
10/27/2012 16:30:00	EOC Operational Briefing	Redick
10/27/2012 17:00:00	Activation of Joint Information Center (JIC)	Batcher
10/27/2012 18:30:00	Shelters to Open to Public	Hawks
10/27/2012 18:30:00	EOC Operational Briefing	Redick
10/27/2012 18:30:00	Flood Gate Closures	Keifer

Associate Area Command Hampton Roads Area Command	
INCIDENT - Tropical Storm Sandy 2012	
1239 CNG pmarino 10/29/2012 12:02:20 Flood	Thornton Hall, a nursing home, has extensive flooding in front of it at the intersection of Norview and Tidewater Drive. Cars are stalling out and there is a concern that emergency vehicles cannot get through. Mikell Rappaport, an employee at the home, called in the concern: her number is 853-6281.
Norview and Tidewater Drive INCIDENT - Tropical Storm Sandy 2012	Medium
1253 EOC Director jredick 10/29/2012 11:49:20	DOMINION VIRGINIA POWER WEATHER UPDATE Today's Dominion Weather Center Statement is attached. DOM's overall expectations for this historically intense storm remain unchanged. The central pressure of Sandy has dropped overnight to near record levels and we expect additional strengthening today.
INCIDENT - Tropical Storm Sandy 2012	
1267 jwilliamson 10/29/2012 10:00:47	Fire Rescue requested 1 National Guard high water truck to assist with coverage
INCIDENT - Tropical Storm Sandy 2012	
1268 Norfolk Airport Police sward 10/29/2012 10:39:36 Hurricane	Norfolk International Airport Flight Information update for US Airways: US Airways has just canceled the planned flight departing at 1335 and 1430 today. At this time we plan to depart on Charlotte flight for the day: Flight 1435 scheduled departure 11:05 to Charlotte Tonight's Arrivals still scheduled: Flight 1688 scheduled arrival 19:14 from Charlotte remain overnight Flight 930 scheduled arrival 21:09 from Charlotte remain overnight

WebEOC T4 - Windows Internet Explorer		
5	NWSWakefield_SandySummary-rainfall.png	
6	NWSWakefield_SandyBriefing_Oct26_7am.pdf	
7	NWSWakefield_SandyBriefing_Oct27_7am.pdf	
8	NWSWakefield_SandyBriefing_Oct29_2pm.pdf	
9	NWSWakefield_SandyBriefing_Oct29_8am.pdf	
10	NWSWakefield_SandyBriefing_Oct30_10am.pdf	
11	Oct 2012 PSAP Process of Reporting Damaged telephone Regions 1 and 5 conference call notes 10-26-12 1000 hours.doc	Verizon
12	Sandy BRIEFING - 10-25-12 0630.pdf	
13	Sandy BRIEFING - 10-25-12 1700.pdf	
14	Sandy BRIEFING - 10-26-12 1400.pdf	
15	Sandy BRIEFING - 10-26-12 0600.pdf	
16	Sandy BRIEFING - 10-28-12 0600.pdf	
17	Sandy BRIEFING - 10-28-12 1800.pdf	
18	Sandy BRIEFING - 10-29-12 0600.pdf	
19	Sandy BRIEFING - 10-29-12 1800.pdf	
20	Sandy SPOT REPORT - 11PM 10-27-2012.pdf	
21	TS Sandy Webpage Email - Bill Sammler - 0659 10-24-2012.docx	
22	Verizon Hurricane Sandy prep release 10-28-2012.pdf	Verizon Press Release, 10-28-12
23	VERT Sit Rep 1 - 26 October 2012 - Hurricane Sandy.docx	
24	VERT Sit Rep 11 - 31 October 2012 - Hurricane Sandy.docx	
25	VERT Sit Rep 12 - 1 November 2012 - Hurricane Sandy (3).docx	
26	VERT Sit Rep 13 - 1 November 2012 - Hurricane Sandy (3).docx	
27	VERT Sit Rep 2 - 27 October 2012 - Hurricane Sandy.docx	
28	VERT Sit Rep 3 - 27 October 2012 - Hurricane Sandy.docx	
29	VERT Sit Rep 4 - 28 October 2012 - Hurricane Sandy.docx	
30	VERT Sit Rep 5 - 28 October 2012 - Hurricane Sandy.docx	

Medical Needs Registry Outreach

Friday, October 26, 2012

Norfolk Public Health Medical Reserve Corps (MRC) Volunteers contacted every Norfolk participant in the Hampton Roads Special Needs Registry to discuss Preparedness, Plans, and ensure Contact Information for use in the Nixle Alert/Notification Program

Wednesday, November 1, 2012

MRC Volunteers returned and followed up with registrants to ensure they were well.



Parking Safe Havens

Downtown City Garages:

Boush Street, Freemason Street, York Street and MacArthur Center Garages North & South.

Other City Lots:

Pretlow Library in Ocean View, Barron Black Library off Military Highway, Bayview Recreation Center, Tarrallton Community Center

Norfolk Public Schools:

Berkeley Multi-Service Center, Blair Middle School, Campostella Elementary, Ghent School, Ingleside Elementary, Larchmont Elementary, Maury High School, Blair Middle School

Old Dominion University:

Parking garages C and D adjacent to Ted Constant Center and E next to the football stadium

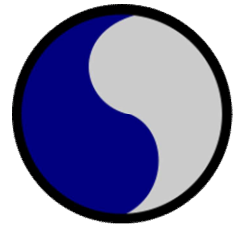
Private:

ATC/Blackhawk off Miller Store Road.





Virginia Army National Guard 1st Battalion, 111th Artillery



SHELTERS

TOTALS

**61 People
Sheltered**

5 Pets



Bayview Recreation Center
(Pet-Friendly Shelter)



Norview High School



Granby High School



Campostella Elementary

All meals and transportation to shelters provided by Norfolk Public Schools

Shelters Managed by Human Services and Staffed by City Departments

Unified Public Information

SUBSCRIBERS

NIXLE

Before: 320
After: 1,664

FACEBOOK

Before: 3,048
After: 3,448

TWITTER

Before: 978
After: 1,200

Joint Information Center





Message Type

Advisory

Sent To:

Public Groups:
Nixle Wire

Message Details:

Entered by:
City of Norfolk, VA Public Safety

Entered on:
Sunday, October 28 2012 :: 6:53 p.m. EDT

Contact:
City of Norfolk, VA Public Safety
3661 E Virginia Beach Blvd Norfolk, VA 23502 | 757-441-5600

SMS Message:

Need a ride to a Norfolk shelter? Call 664-7200

Email and Web Message:

Email and Web Subject
Need a ride to a Norfolk shelter? Call 664-7200

Email and Web Body
Need a ride to a Norfolk shelter? Call 664-7200

Also Published to:

Facebook

Status:


SMS Sent: 1376 Email Sent: 462



nixle Trusted By The People You Trust Registered Subscribers: [Sign In Here](#) [Sign up with Facebook](#)

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 **City of Norfolk, VA Public Safety**


Sunday October 28th, 2012 :: 06:53 p.m. EDT [f Share](#) [t Tweet](#) [e Forward](#) [g+](#)

Advisory **Need a ride to a Norfolk shelter? Call 664-7200**

Need a ride to a Norfolk shelter? Call 664-7200

Address/Location:
[City of Norfolk, VA Public Safety](#)
3661 E Virginia Beach Blvd
Norfolk, VA 23502


Contact:
Emergency: 9-1-1
Non-emergencies: 757-441-5600

 Add a comment...
☒ Post to Facebook Posting as Jim Redick (Not you?) [Comment](#)


[See more messages from Norfolk, Virginia »](#)

Navigate & Discover
Enter a town, zip code or address [GO!](#)





 **City of Norfolk Government** shared a link via Nixle Post.
October 28


From City of Norfolk, VA Public Safety, sent via Nixle

 **Need a ride to a Norfolk shelter? Call 664-7200 from City of Norfolk, VA Public Safety : Nixle**
local.nixle.com

Need a ride to a Norfolk shelter? Call 664-7200

Like · Comment · Share  4

 6 people like this.

 Write a comment...



Address

Street

Block

Street Intersection

All Active Events

Enter the address for the event.

i.e., 401 Monticello Avenue

	Location	Type	Date/Time	Status	Event ID
View	333 WATERSIDE DRIVE	Other	10/31/2012 3:49:02 PM	A	3697
View	1530 FLORIDA AVENUE	Damaged building	10/31/2012 3:45:08 PM	A	3696
View	GREGORY DRIVE & WIDGEON ROAD	Traffic sign issue	10/31/2012 10:14:13 AM	A	3695
View	1024 WIDGEON ROAD	Traffic sign issue	10/31/2012 9:00:10 AM	A	3694
View	1809 DOMINION AVENUE	Damaged building	10/31/2012 8:59:23 AM	A	3693
View	9633 19TH BAY STREET	Damaged building	10/31/2012 8:58:24 AM	A	3692
View	9632 19TH BAY STREET	Damaged building	10/31/2012 8:58:00 AM	A	3691

1 2 3 4 5 6 7 8 9 10

First Page

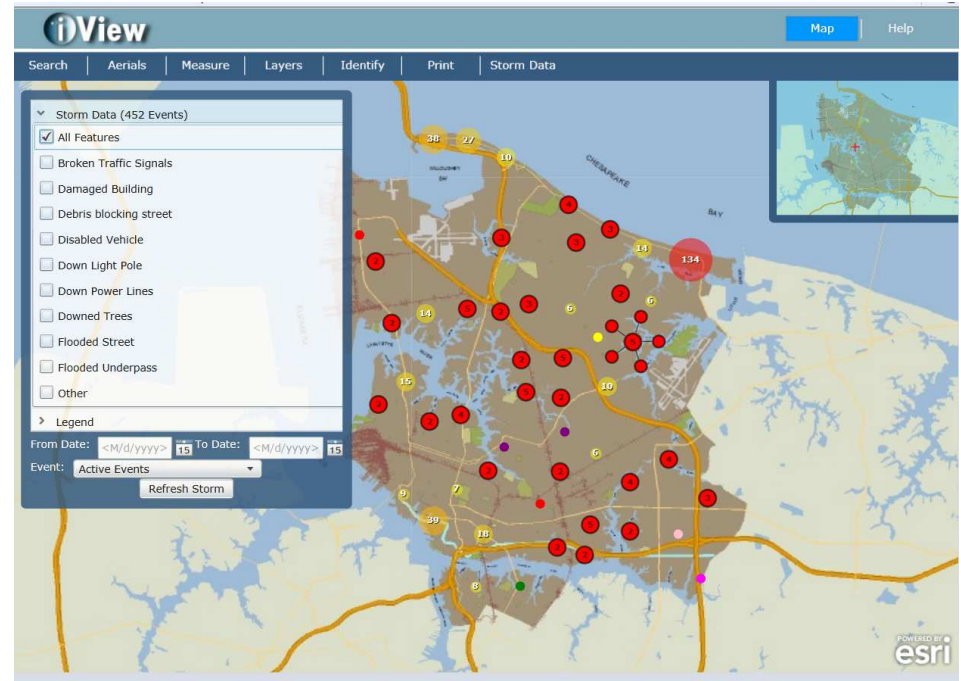
Last Page

STORM

2012 Governor's Technology Award
Innovative Use of Technology in Local Government
Fraser Picard, Norfolk GIS

iView

Available to the Public
through Norfolk.gov



Recovery – Damage Assessment

- Completed the day after the storm
- Exterior review of property using guidelines approved by the Virginia Department of Emergency management
- Intended to provide a quick estimate/ projection of damages

Recovery – Damage Assessment



Individual Assistance Damage Assessment Level Guidelines

Damage Definitions	General Description	Things to Look For	Water Levels
DESTROYED	DESTROYED	DESTROYED	DESTROYED
Structure is a total loss. <u>Not economically feasible to rebuild.</u>	Structure leveled above the foundation, or second floor is gone. Foundation or basement is significantly damaged.	Structure leveled or has major shifting off it's foundation or only the foundation remains. Roof is gone, with noticeable distortion to walls.	More than 4 feet in first floor. More than 2 feet in mobile home .
MAJOR	MAJOR	MAJOR	MAJOR
Structure is currently uninhabitable. Extensive repairs are necessary to make habitable. <u>Will take more than 30 days to repair.</u>	Walls collapsed. Exterior frame damaged. Roof off or collapsed. Major damage to utilities: furnace, water heater, well, septic system.	Portions of the roof and decking missing. Twisted, bowed, cracked, or collapsed walls. Structure penetrated by large foreign object, such as tree. Damaged foundation.	2 to 4 feet in first floor without basement. 1 foot or more in first floor with basement. 6 inches to 2 feet in mobile home with plywood floors. 1 inch in mobile home with particle board floors.
MINOR	MINOR	MINOR	MINOR
Structure is damaged, and uninhabitable. Minor repairs are necessary to make habitable. <u>Will take less than 30 days to repair.</u>	Interior flooring / exterior walls with minor damage. Tree(s) fallen on structure. Smoke damage. Shingles / roof tiles moved or missing.	Many missing shingles, broken windows and doors. Loose or missing siding. Minor shifting or settling of foundation. Minor damage to septic system.	2 inches to 2 feet in first floor without basement. 1 foot or more in basement. <u>Crawlspace</u> – reached insulation. <u>Sewage</u> - in basement. Mobile home , "Belly Board" to 6 inches.
AFFECTED HABITABLE	AFFECTED HABITABLE	AFFECTED HABITABLE	AFFECTED HABITABLE
Structure has received minimal damage and is <u>habitable without repairs.</u>	Chimney or porch damaged. Carpet on first floor soaked. Broken windows.	Few missing shingles, some broken windows. Damage to air conditioning units / etc. Some minor basement flooding.	Less than 2 inches in first floor Minor basement flooding. Mobile home , no water in "Belly Board".

IDA Tips: Estimating Water Depths

Brick - 2 1/2 inches per course

Lap or aluminum siding - 4 inches or 8 inches per course

Stair risers - 7 inches

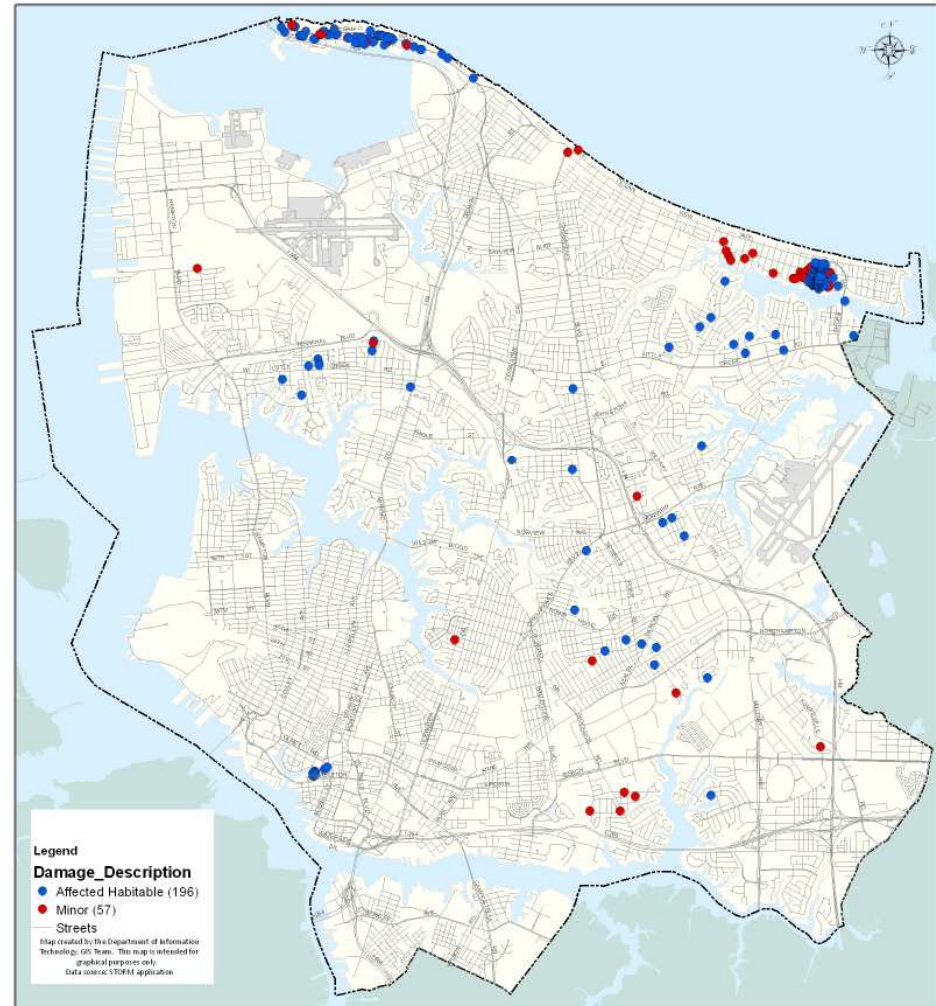
Concrete or cinder block - 8 inches per course

Door knobs - 36 inches above floor

Standard doors - 6 feet 8 inches

Recovery – Damage Assessment Results

- No significant public property damage found
 - Primarily debris removal
 - \$251,000 estimated value
- No significant private property damage found
 - 253 properties
 - 196 Affected
 - 57 Minor Damage
 - \$3,657,665 estimated value



Next Steps

- After Action Report
- Improvement Planning and Implementation
- Schedule Training
- Mitigate
- Exercise